



Connecticut River Gateway Commission
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Dark Skies for the Lower Connecticut River

We are blessed to enjoy nature's beauty year-round in the Connecticut River Valley. But the valley's beautiful starry nights are at risk of being drowned out by light pollution.

What is light pollution?

Light pollution by one definition is overly bright, poorly directed, or intrusive outdoor light. It's often wastefully aimed into the sky rather than the areas where it's needed for our safety and security. In fact, the International Dark-Sky Association's research shows that targeted, low-glare lighting actually deters crime better than does glare from bright floodlights. Excessive lighting can also result in "light trespass" by shining into neighbors' yards and home windows.

Why is light pollution a problem?

Excessive night lighting can affect our health by disrupting our bodies' rhythms, causing poor sleep, anxiety, headaches, and other health issues.

Light pollution also harms wildlife. Along the Connecticut River, high temperature lights (wavelengths on the high-energy, blue end of the spectrum) can disturb the natural movement of fish and disrupt amphibians in adjacent wetlands. Excessive night light can have devastating effects on birds that migrate or hunt at night too, killing millions worldwide as they collide with brightly lit buildings or get confused by bright illumination.

Lighting aimed out over the river also impacts diel migration. This is the daily cycle of microorganisms in water bodies rising at night to feed on the surface and falling to the bottom during the daytime. This disturbance can increase growth of algae and result in poorer water quality.

What Can Towns Do?

The Connecticut River Gateway Commission unanimously voted to adopt a new light pollution definition and site plan review standard concerning light pollution, applicable to all new structures over 4,000 square feet in the Gateway Zone. In part, the standard reads "*Within the Conservation Zone, lighting of properties, including site lighting and the illumination of building facades and other architectural features, shall be the minimum necessary for health and safety.*" We encourage towns to go further and adopt a lighting ordinance applicable to all new construction; model text is available from the International Dark-Sky Association's website, www.darksky.org.

What steps can I take?

Solving the problem is up to each of us. Thankfully, the best solutions also save money. Only use lighting as needed. Motion detectors can improve safety around your home without constant illumination.

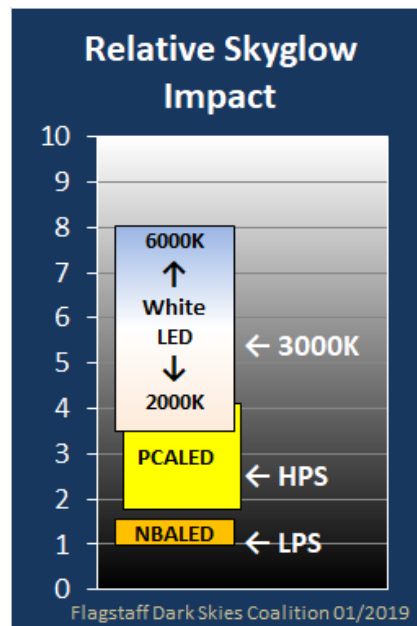
You can light your yard for safety and security without lighting the sky, too. Aim your lighting to where you walk and to where it will best add to your home's security. Shielded, full cutoff light fixtures can direct light more efficiently to where it is necessary without spilling out to adjacent properties and the river.



The photo above shows a problematic lighting arrangement that causes glare and results in unnecessary illumination. Avoid shining lights onto the river or its coves. If you need dock lights, timed motion sensors are a great choice. Good lighting practices can save on energy use and costs.

In addition to shielding, optimizing your light color can minimize harmful effects. High-energy wavelengths (blue light) tend to brighten the sky and threaten nature more than “warmer,” lower-temperature colors. Look for lights below 2,700K.

The *International Dark-Sky Association* is a recognized authority on light pollution and provides information on responsible night lighting, including a listing of approved fixtures and retail outlets that sell them: www.darksky.org/our-work/lighting/.



Created by state law, the Connecticut River Gateway Commission is comprised of representatives from Chester, Deep River, Essex, East Haddam, Haddam, Lyme, Old Lyme, Old Saybrook, RiverCOG and the Connecticut Department of Energy and Environmental Protection. See ctrivergateway.org.